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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/351,086	07/09/1999	NEVENKA DIMITROVA	PHA-23.716	9235

24737 7590 07/22/2003

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER

GRANT, CHRISTOPHER C

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 07/22/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/351,086

Applicant(s)

DIMITROVA, NEVENKA

Examiner

Christopher Grant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) g.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Note to Applicant*

1. Applicant's representative, Daniel Tierney, informed the examiner on 7/17/2003, that there are no detail rejections for claims 9-11 in the Office Action. On 7/21/2003, the examiner contacted Daniel Tierney and informed him that claims 1-4, 9-13 and 18-23 are rejected over "Media-based Navigation with Generic Links" by Paul H. Lewis (provided by Applicant in the IDS filed 12/26/2000).

2. The finality of the rejection of the last Office action is withdrawn.

### *Claim Objections*

3. Claim 10 is objected to because of the following informalities:

Claim 10 is objected because it contains more than one period and the repeated expression "*first video segment. video segment,*" in the claim. A claim must have one period. See MPEP 608.01 (m). Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-7, 16 and 18-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Dimitorva et al. (Dimitorva) (WO 97/40454) (provided by applicant).

Considering claims 1 and 18-23, Dimitorva discloses a method, a corresponding Apparatus (figure 3), a corresponding article of manufacture, for processing video the method comprising the steps of:

- a) determining an association (comparison steps in figure 2) between a first video segment (video clip taken from flow chart in figure 1 or the query video clip) including a particular feature (signature, stored in memory) and at least one additional information source (other video clips or the database video clip, figure 2) also including that feature (signature) (pages 5-9), the association based upon the feature (signature) (for example a signature representing “a man with skies” as indicated at 52 shown at the upper leftmost image in the workspace for retrieval area 54 of figure 12);
- b) utilizing the association to display information from the additional information source based at least in part on a selection by a user of the feature in the first video segment (see the abstract, page 4, lines 3-32 and when a user selects “the man with skies” from query video clip 52, the system searches extracted signatures from a database to display associated or corresponding clips, i.e. other clips showing a man with skies as illustrated in figure 12 of workspace 54 as disclosed at page 27, line 31 – page 28, line 6).

Claim 2 is met by the retrieval of the signature from memory disclosed throughout the entire reference including but not limited to page 7, lines 7-10.

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Claim 3 is met by the extracted signature that is a portion of the video segment.

Claim 4 is met by the “other video signals” or the “database video clips” as disclosed at page 7, line 16 – page 8, line 19, the abstract and figure 2.

Claim 5 is met by the retrieval and display of all video clips including the query and database video clips as discussed throughout the reference including but not limited to page 3, line 15 – page 4, line 32.

Claim 6 is met by the display of the first video segment and the additional video segments illustrated in figure 12.

Claim 7 is met by the frames disclosed at page 6, lines 17-27.

Claim 16 is met by motion vectors discussed throughout the entire reference including but not limited to page 6, lines 1 –35.

6. Claims 1-4, 9-13 and 18-23 are rejected under 35 U.S.C. 102(b) as being anticipated by “Media-based Navigation with Generic Links” by Paul H. Lewis (provided by applicant).

Considering claims 1 and 18-23, Lewis discloses a method, a corresponding Apparatus, a corresponding article of manufacture, for processing video the method comprising the steps of:

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- a) determining an association between a first video segment (links represented as relations between two or more anchors) including a particular feature (sound signature described at page 217, lines 45-52) and at least one additional information source (other images or video) also including that feature (sound signature), the association based upon the feature (sound signature) (see page 217, right hand column, lines 25-54); and
- b) utilizing the association to display information from the additional information source based at least in part on a selection by a user of the feature in the first video segment (pages 220-221).

Claim 2 is met by the retrieval of the signature from memory disclosed throughout the entire reference including but not limited to page 220 and page 218 (left column).

Claim 3 is met by the extracted sound signature that is a portion of the audio-video segment.

Claim 4 is met by other images or video signals as disclosed at page 217, right hand column, lines 45-52 and pages 220-221.

Claim 9 is met by sound frequency spectrum disclosed at page 217, right hand column, lines 45-52 and page 218 (right hand column)

Claim 10 is met by linking of a sound signature with another video or image signal described at pages 220-221 ("link following").

Claim 11 is met by conversion to text of sound signature described at page 222 (left hand column).

Claims 12-13 are met by the sound signature of the video or image that is inherently inclusive of voice, speech and music as disclosed throughout the document including but not limited to page 222 (left hand column).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dimitorva in view of Correia (The role of analysis in content-based video coding and indexing) (provided by applicant).

Considering claim 8, Dimitorva fails to specifically disclose that the video feature comprises at least one of a frame characterization, face identification, scene identification, and event identification, and an object identification as recited in the claim.

Correia discloses that the video feature extracted is an object. The extraction of objects provides a more efficient and dynamic technique of manipulating/editing items in a scene. See section 3.2.

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It would have been obvious to one of ordinary skill in the art to modify Dimitorva's system to include scene identification or an object identification, as taught by Correia, for the advantage of providing a more efficient and dynamic technique of manipulating/editing and/or extracting items in a scene.

9. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dimitorva in view of Shahraray (Pictorial Transcripts: Multimedia processing applied to digital library creation) (provided by applicant).

Considering claims 14-15, Dimitorva fails to specifically disclose that the feature is a textual feature extracted from the frame of the video signal and displaying textual information as an overlay on a display of the first video segment as recited in the claims.

Shahraray discloses that the feature is textual information extracted from the frame of the video signal and displaying the textual information as an overlay on a display of a video segment. This system provides an easy extraction technique that enables the display of characters. See pages 583-586.

It would have been obvious to one of ordinary skill in the art to modify Dimitorva's system to include a textual feature extracted from the frame of the video signal and displaying the textual information as an overlay on a display, as taught by Shahraray, for the typical advantage of providing an easy extraction technique that enables the display of characters from a video signal.



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10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dimitorva in view of Applicant's conceded prior art at page 9, line 19 – page 10, line 13.

Considering claim 17, Dimitorva fails to specifically determining association based on a similarity and clustering technique as recited in the claim.

Applicant conceded at page 9, line 19 – page 10, line 13 that determining association based on a similarity and clustering is a well known technique that provides features based on similarities among plural video signals.

It would have been obvious to one of ordinary skill in the art to modify Dimitorva's system to include determining association based on a similarity and clustering technique, as admitted by applicant, for the advantage of providing features based on similarities among plural video signals.

#### ***Response to Arguments***

11. Applicant's arguments filed 3/24/2003 have been fully considered but they are not persuasive.

#### **Response to Applicant's arguments**

a) Applicant argues that “***Because the similarities between frames of Dimitrova are based upon DC+M signatures for window pairs, that is, two or more locations that are predetermined in a video frame, similarities between frames are not and cannot be based upon a particular feature in the frame***” on page 5 (fourth paragraph) of the amendment filed 3/24/2003.

In response, the Examiner disagrees with the Applicant. First, the “particular feature” as claimed corresponds to “the signature”, wherein the signature may represent “a man with skies”

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as indicated at 52 (shown at the upper leftmost image in the workspace for retrieval area 54 of figure 12). When a user selects “the man with skies” from query video clip 52, the system searches extracted signatures from a database to display associated or corresponding clips (other clips showing a man with skies as illustrated in figure 12 of workspace 54). See page 27, line 31 – page 28, line 6.

Secondly, it is true that in Dimitorva similarity between clips is determined by evaluating a number of sample regions using window pairs. However, Applicant’s claims do not preclude the technique utilized in extracting the “particular feature”. The claims call for “a particular feature” which corresponds to Dimitorva’s signature. In one instance, the signature represents “a man with skies”.

Thirdly, Applicant is reminded that claims are interpreted in light of the specification, however limitations from the specification are not read into the claims.

b) Applicant argues that “*Thus, there is also no “utilizing the association to display information from the additional information source based at least in part on a selection by a user of the feature in the first video segment as recited in claim 1”* on page 6 (second paragraph) of the amendment.

In response, the Examiner disagrees with the Applicant. Again, the “particular feature” as claimed corresponds to “the signature”, wherein the signature may represent “a man with skies” as indicated at 52 (shown at the upper leftmost image in the workspace for retrieval area 54 of figure 12). When a user selects “the man with skies” from query video clip 52, the system searches extracted signatures from a database to display associated or corresponding clips (other

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clips showing a man with skies as illustrated in figure 12 of workspace 54). See page 27, line 31  
– page 28, line 6.

For all the reasons given above, the Examiner posits that Applicant's arguments are not  
persuasive.

### ***Conclusion***

12. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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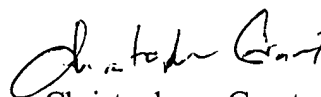
\_\_\_\_\_  
Signature: \_\_\_\_\_

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Grant whose telephone number is (703) 305 4755. The examiner can normally be reached on Monday-Friday 8:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872 9314 for regular communications and (703) 872 9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



Christopher Grant  
Primary Examiner  
Art Unit 2611

CG  
July 21, 2003